

Date: Wed, 11 Aug 93 04:30:26 PDT  
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>  
Errors-To: Ham-Space-Errors@UCSD.Edu  
Reply-To: Ham-Space@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Space Digest V93 #5  
To: Ham-Space

Ham-Space Digest                      Wed, 11 Aug 93                      Volume 93 : Issue                      5

Today's Topics:

                    ARRL Keplerian Bull 31  
                    Kepler Elements via the Internet  
                    Meteori scatter and Troposcatter  
                    Satellite-Navigation-Systems, Infos wanted. (2 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>  
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Wed, 11 Aug 1993 01:22:55 GMT  
From: news.cerf.net!pagesat!spssig.spss.com!feenix.metronet.com!  
marchbg@network.ucsd.edu  
Subject: ARRL Keplerian Bull 31  
To: ham-space@ucsd.edu

SB KEP @ ARL \$ARLK031  
ARLK031 Keplerian data

ZCZC SK43  
QST de W1AW  
Keplerian Bulletin 31 ARLK031

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Date: Tue, 10 Aug 1993 14:06:08 +0000  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!doc.ic.ac.uk!warwick!qmw-dcs!qmw!  
demon!cotswold.demon.co.uk!nigel@network.ucsd.edu  
Subject: Kepler Elements via the Internet

To: ham-space@ucsd.edu

Before anyone says I have checked for an FAQ and not found one. Is it possible to obtain kepler elements via the Internet?

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Date: 10 Aug 93 18:03:18 GMT  
From: headwall.Stanford.EDU!Csli!paulf@RUTGERS.EDU  
Subject: Meteori scatter and Troposcatter  
To: ham-space@ucsd.edu

tjonz@caliban.Corp.Sun.COM (Todd Jonz) writes:

>It sounds like Dean is looking for a reliable path, and Glenn recommends  
>meteor scatter, which surprised me. I had the impression that meteor scatter  
>was a very occasional thing, like when the Persids or Leonids were in town.  
>Is this not the case? If I were to work nothing other than meteor scatter,  
>how many hours would I be able to work during an "average" week?

Well, now that all depends on a number of factors. If you rely on shower meteors (known in the MBC world as "overdense"), then you're correct, the time between pings is quite long. Most MBC systems, however, rely on underdense meteors, which are the result of collisions with cosmic dust, and which are far more frequent ( $10^{14}$  per day). The exact equations are in the CCIR Green Books.

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--Paul Flaherty, N9FZX | "The National Anthem has become The Whine."  
->paulf@Stanford.EDU | -- Charles Sykes, \_A Nation of Victims\_  
  
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Date: Tue, 10 Aug 1993 10:40:54 -0400  
From: swrinde!cs.utexas.edu!math.ohio-state.edu!magnus.acs.ohio-state.edu!  
cis.ohio-state.edu!news.sei.cmu.edu!bb3.andrew.cmu.edu!andrew.cmu.edu!  
bt01+@network.ucsd.edu  
Subject: Satellite-Navigation-Systems, Infos wanted.  
To: ham-space@ucsd.edu

Dear Melody,

Your friend probably used the US 'GPS' or Global Positioning Service, or possibly the Russian version called GLONASS.

I'm not an expert on this, but I believe that both systems operate by having satellites constantly transmitting information (very precise time, and a satellite ephemeris or position table), which the receiver uses to establish a user's location. The user only receives information -- nothing is transmitted except by the satellites.

It is legal to use this any time, anywhere, at least in the USA. Other countries may limit the use of radio receivers.

You can estimate your position in two dimensions quite well, under 200 metres. The US version has a dithering feature which the military controls. When that feature is off, you can get a 2D position to perhaps 20 metres. Information on vertical position is also available, but requires more satellites be received, and is generally slightly less precise.

Costs of the GPS receivers are dropping rapidly. Boating supply houses may be a good place to look. In US dollars, prices seem to range from perhaps USD\$600 through USD\$2,000. The high end is for units which are intended for aircraft, or that have other specialized features.

Sony, Trimble, and others make units for the US market -- I'm sure that there are many other manufacturers elsewhere.

- Bruce Taylor (blt+@cmu.edu)

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Date: Wed, 11 Aug 1993 11:17:14  
From: news.univie.ac.Subject: Satelite-Navigation-Systems, Infos wanted.  
To: ham-space@ucsd.edu

In article <ggNvBq000UzxQ1x2VE@andrew.cmu.edu> blt+@CMU.EDU (Bruce Taylor) writes:

At the moment in the newsgroup "de.sci.misc" there is a diskussion about this topic.

Roland

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[--- Technische Universitaet Wien, Institut fuer Allgemeine Maschinenlehre ---]  
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Date: (null)

From: (null)

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End of Ham-Space Digest V93 #5

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